

Recovering Patient Records After a Water-Related Disaster

Every year there are hurricanes, floods, water main breaks and other water-related incidents that damage or destroy patient records stored in paper-based files or computer systems. When you return to your office and resume operations following a water-related disaster there are several steps you should follow to ensure you recover as much patient information as possible. If you carefully follow the *Dos and Don'ts* below there is very good chance you may be able to recover this valuable information.

SPECIAL NOTE FOR AGENCIES AFFECTED BY HURRICANE KATRINA

A disaster of Hurricane Katrina's magnitude is unprecedented. The fact that many home care provider offices have been inundated with contaminated water for more than two weeks will compound the problems normally associated with recovering paper or electronic records. Time is of the essence in such recovery efforts. Paper records typically begin deteriorating in just a few days with mold and mildew likely forming within 48 hours in warm humid climates. Sensitive computer electronics may begin to corrode from continuous exposure to moisture over a long time period, rendering devices inoperable and magnetic media such as tapes and floppy disks may be permanently damaged as a result of exposure to the chemical contaminants in flood waters.

Paper Records

Damage to paper records will be a function of the extent of water in your office and the duration of exposure. The deeper the water and the longer records are saturated, the less likely it is that you will be able to recover your paper-based patient files. You may be able to preserve paper documentation stored in cabinets or sealed containers and those files that had only minimal water exposure by following a few simple steps. Mold, mildew and physical deterioration are the primary recovery challenges that you will encounter.

DO

- ✓ Remove standing water as soon as possible.
- ✓ Reduce room temperature below 65) and lower humidity to slow growth of mold and mildew.
- ✓ Circulate air with fans, if power is available.
- ✓ Be very careful handling wet documents, mishandling can damage or destroy them.
- ✓ Pack documents that you can handle in file boxes and label boxes with a waterproof marker.
- ✓ Move documents that can be salvaged to an air conditioned area as soon as possible.

DO NOT

- ✓ Re-pack documents that are in saturated file boxes, put boxes in plastic baskets.
- ✓ Separate sheets of paper before thoroughly drying.
- ✓ Pick up individual documents, whenever possible handle file folders.
- ✓ Over-pack file boxes, keep them about 3/4 full.

If you have returned to your office in time (usually 2-3 days following an incident) and it appears that you will be able to recover some or all of your records, you may want to consider placing salvageable documents in a freezer, if power is available. Doing this will stop deterioration and mold or mildew growth and will give you an opportunity to recover individual documents under more controlled circumstances.

Computer Records

If your agency routinely backs up files from your patient accounting and clinical systems and stores these backup copies in a secured dry location, you may be able to resume operations relatively quickly following an incident. If your agency uses a remotely-hosted application, where your data is stored off site, you may experience little disruption to your operations. If you do not have a backup copy of your patient data readily available recovery will be more challenging and costly, but not impossible.

As you think about resuming operations and restoring computer files do not overlook patient data that may be stored on individual computers rather than your agency's server. For example, you may have OASIS data on a separate computer that you use to transmit to your state agency, or a mailing list used for fund raising or bereavement letters might be stored on an individual's desktop PC or laptop.

Do not assume that data stored on your computers is lost, no matter what the machines have been put through. In most instances, if handled timely and in a proper manner, data stored on a hard drive can be saved by firms that specialize in data recovery. This is not necessarily the case with magnetic media such as tapes or diskettes, whose recording surfaces may be damaged or destroyed by exposure to contaminants. And, data stored on CDs can usually be recovered by merely rinsing the disk with tap water and air drying it.

Rule #1... DO NOT TURN ON YOUR COMPUTERS UNTIL A PROFESSIONAL HAS LOOKED AT THEM! If you turn on a computer that has been water soaked you may short it out, damaging circuitry and potentially destroying any data that is on the hard drive. Unplug all of your computers as soon as you return to your agency, particularly if you are returning before the power is restored. You do not want computers trying to start up when the power comes back on.

Rule #2... DO NOT TRY TO REPAIR YOUR COMPUTERS ON YOUR OWN! Unless you are a computer technician there is very little you can do that can help the situation once your computer has been water soaked. Your primary job in recovery is to act as quickly as possible to preserve your computers and media, removing them from your office so they can be examined by a professional.

DO

- ✓ Write down passwords and filenames as soon as possible so you do not forget them later.
- ✓ Rinse media that has been exposed to mud, sewage or sea water with tap water as soon as possible.
- ✓ Magnetic media that is wet should be kept wet so contaminants don't dry on tapes and diskettes, place them in water filled plastic bags to preserve.

DO NOT

- ✓ Attempt to dry out the computer on your own; pack the computer or your hard drive in a plastic bag and get it to a professional as soon as possible.
- ✓ Attempt to clean the hard drive on your own; contaminants (particularly salt water) can severely damage a hard drive if not properly removed.
- ✓ Power up any device that is visibly damaged.
- ✓ Touch magnetic media with your bare hands, the recording surface can be damaged.
- ✓ Freeze magnetic media, tapes can stretch and lubricants can may dry out.

If you follow the steps above there is a very good chance that you will be able to recover some or all of your computer data. Remember, time is your worst enemy in such situations. Your goal is to take action as quickly as possible.